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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/644,911	08/24/2000	Nozomu Ikeda	7217/62372	1862

7590

04/06/2004

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EXAMINER
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GHULAMALI, QUTBUDDIN

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 04/06/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/644,911

Applicant(s)

IKEDA, NOZOMU

Examiner

Qutub Ghulamali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 14-24, 28-34, 38-47, 49-50 is/are rejected.
- 7) ☒ Claim(s) 11-13, 25-27, 35-37 and 48 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Specification*

1. The title of the invention is too long. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Information signal reception and transmission apparatus and method".

2. Claim 26 objected to because of the following informalities: Claim 1, line, "he" should be changed to "the". Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 40, 42, 43, 45, 46 and 49 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 40 recites a device information transmitting means. Such claim, consequently, is considered as a single means since the transmitting means does not

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seem to appear in combination with another recited element of means. Consequently, such claim is held nonenabling. See MPEP 2164.08(a).

Claims 42, 43, 45, 46, and 49 fail to cure the deficiencies noted in claim 40, they are likewise rejected.

Similarly, claim 50 is rejected under 35 U.S.C. 112, first paragraph.

Claim 50, is narrative in form and do not contain positively recited steps of a specific process. Note that method claims should set forth a series of steps in the active tense in an instruction-like manner thereby reciting an actual method. The claim only recites a single step without any additional steps delimiting how its use is actually practiced. Dependent claims (if applicable) should further limit base claims by reciting additional method steps in a likewise fashion. Ex parte Erlich 3UPQ2d 1011 at 1017(6).

### *Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-7, 10, 14-21, 24, 28, 29-32, 38, 39-44, 47, 49, 50 are rejected under 35

U.S.C. 102(e) as being anticipated by Norizuki et al ("Norizuki") (US Patent No. 5,675,574).

Consider claims 1, 15, 29, 32, 39, 40, 49, 50 Norizuki (figs. 1, 2A, 2B), teaches an information transmission method wherein a PBX 1 (first electronic device) and an ATM (second

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electronic device) transmission unit 6 are coupled to each other via an analog interface (analog transmission line) 5, ATM unit 6 (second electronic device) outputs (supplied) a detection signal (device information) over the information signal transmission line 5, PBX 1 (first electronic device) includes a detection unit 3 (means) to detect device information transmitted via the trunk 4 connected to the transmission line 5, the detection unit 3 notifies the controller 2 (control means) of the analog transmission and controls outputting the of the detected device information (col. 3, lines 33-60).

Regarding claims 2, 16, 21, 30, 41, 44 Norizuki teaches (figs. 1, 2A), that when a terminal (not shown) connected to the PBX 70 calls a terminal (not shown) connected to the PBX 76, a connection between the calling terminal and the ATM transmission unit 72 is made via the interface 71, each of the ATM multiplexing transmission units converts an analog signal from a terminal into a digital signal and assembles ATM cells from the digital signal, information from the calling terminal is transferred to the STM transmission unit 74 via the assigned channel in the multiplexed transmission path 73, the information transferred using the assigned channel is separated from other information in the STM transmission unit 74, and is then transferred to the called terminal via the PBX 76 (col. 1, lines 40-63; col. 2, lines 1-7).

Regarding claims 3, 17, Norizuki teaches (fig. 1; 2A, 2B), teaches an information transmission method wherein a PBX 1 (first electronic device) and an ATM (second electronic device) transmission unit 6 are coupled to each other via an analog interface (analog transmission line) 5, ATM unit 6 (second electronic device) outputs (supplied) a detection signal (device information) over the information signal transmission line 5, PBX 1 (first electronic device) includes a detection unit 3 (means) to detect device information transmitted

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via the trunk 4 connected to the transmission line 5, the detection unit 3 notifies the controller 2 (control means) of the analog transmission and controls outputting the of the detected device information (col. 3, lines 33-60).

Regarding claims 4, 18, 31 Norizuki teaches (fig. 5) an analog interface between PBX 20 (first electronic device) and the ATM 21 (second electronic device), equipped with a both way trunk 200 to which are connected two wires L1 and L2 controlling from input from the detector included in PBX 20, the signaling bit and a line L3 for transferring (output) signals (col. 5, lines 46-67; col. 6, lines 1-34).

Regarding claims 5, 19, 42 Norizuki discloses that the existing terminals and transmission units are continuously used (always supplies) for a while after the ATM (second device) networks enter into practical use (col. 7, lines 11-23).

With reference to claims 6, 10, 20, 24, 43, 47, Norizuki discloses a conventional multiplexing transmission wherein due to traffic congestion the transmission path 73 directed from unit 72 (device 1) to the unit 74 (device 2) become busy and the multiplexed transmission path 73 is suppressed (col. 1, lines 51-63).

Regarding claim 7, Norizuki discloses an information transmission method wherein a PBX 1 (first electronic device) and an ATM (second electronic device) transmission unit 6 are coupled to each other via an analog interface (analog transmission line) 5, ATM unit 6 (second electronic device) outputs (supplied) a detection signal (device information) over the information signal transmission line 5, PBX 1 (first electronic device) includes a detection unit 3 (means) to detect device information transmitted via the trunk 4 connected to the transmission line 5, the

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detection unit 3 notifies the controller 2 (control means) of the analog transmission and controls outputting the of the detected device information (col. 3, lines 33-60).

Regarding claims 14, 28, 38, Norizuki discloses (fig. 2B) a PBX (device 1) and an ATM transmission unit 16 (second device) are coupled to each other via a digital interface in place of analog output terminal wherein 11 comprises a controller 12, a signal detector unit 13, a multiplexing unit 14, the ATM unit 14 comprises an ATM adaptation layer unit 17, a signal controller 18 and ATM layer unit 19 (col.3, lines 62-67; col. 4, lines 1-3).

### *Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8, 9, 22, 23, 33, 34, 45, 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norizuki et al ("Norizuki") (US Patent No. 5,675,574) in view of Sugita et al ("Sugita") (US Patent No. 6,389,137).

Consider claims 8, 9, 22, 23, 33, 34, 45, 46, Norizuki has been described above noting Figures 1, 2A-B, 5. Norizuki, however, fails to disclose information supplied by second device has a lower signal level than a primary signal level using a spread spectrum conversion.

Sugita discloses a method, wherein the original recording signal is generated with a sufficiently fast period and spectrally spread by applying it to the anti-duplication control signal, a narrow bandwidth, high level anti-duplication control signal is converted to a wideband, low

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level signal which does not affect the video signal or sound signal (col. 7, lines 40-52). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a low level spread spectrum conversion signal for information transmission so as to minimize deterioration of the signal as taught by Sugita.

***Allowable Subject Matter***

9. Claims 11-13, 25-27, 35-37, 48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Matsumoto et al (US Patent 5,621,659), Ludtke (US Patent 6,237,049), Daniels (US Pub. No. 2002/0032907 A1), are cited as arts of reference.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qutub Ghulamali whose telephone number is (703) 305-7868. The examiner can normally be reached on Monday-Friday from 8:00AM - 5:00PM.

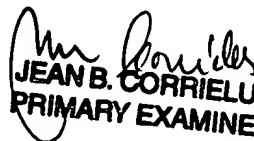
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammed Ghayour can be reached on 703 306-3034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

QG.  
April 2, 2004.

  
JEAN B. CORRIELUS  
PRIMARY EXAMINER  
4/5/04